

ABSTRACT

The invention includes polymers that contain a polymers of the invention contain one or more 1) carbonate units and/or 2) a lactone provided by a monomer having a ring oxygen adjacent to the monomer vinyl group. The invention also provides photoresists that contain such polymers, particularly for imaging at short wavelengths such as sub-200 nm.

1. A polymer containing one or more carbonate units and/or one or more lactone units, wherein the carbonate units and/or lactone units are provided by a monomer having a ring oxygen adjacent to the monomer vinyl group.